

HMR2053.ST25  
SEQUENCE LISTING

<110> AVENTIS PHARMACEUTICALS INC.  
GUO, Yong  
MORSE, Clarence  
YAO, Zhengbin

<120> MEMBRANE PENETRATING PEPTIDES AND USES THEREOF

<130> HMR2053 PCT

<140> PCT/US 01/26421  
<141> 2001-08-23

<150> US 60/27,647  
<151> 2000-08-25

<150> GB 0103110.3  
<151> 2001-02-07

<160> 54

<170> PatentIn version 3.0

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<223> Sequence of nuclear location sequence contained within the N-terminal of IL-alpha propiece

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Asn Gly Lys Val Leu Lys Lys Arg Arg Leu  
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<223> The fibroblast growth factor signal sequence peptide

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Ala Ala Val Ala Leu Leu Pro Ala Val Leu Leu Ala Leu Leu Ala  
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<220>  
<223> HIV tat signal sequence peptide

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Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly Arg Lys Lys Arg  
1 5 10 15

Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr His  
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Arg Lys Arg Lys Arg Ser Arg  
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<400> 7

Asn Tyr Lys Lys Pro Lys Leu  
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<223> Linus luteus nuclear protein import sequence

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Lys Pro Lys Lys Lys Lys Glu Lys  
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Lys Lys Leu Lys Lys  
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Lys Lys Pro Leu Gln Leu Ile  
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Gly Phe Leu Gly  
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Asp Asp Asp Asp Lys  
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Glu Tyr Phe Pro  
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Lys Arg Arg Gln Arg Arg Arg  
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Lys Arg Arg Gln Arg Arg Arg  
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Asp Asp Lys

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Lys

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Pro Arg Asp

&lt;210&gt; 27

&lt;211&gt; 12

&lt;212&gt; PRT

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Peptide

&lt;400&gt; 27

Gly Arg Lys Gly Lys His Lys Arg Lys Lys Leu Pro  
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&lt;210&gt; 28

&lt;211&gt; 18

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&lt;220&gt;

&lt;223&gt; peptide

&lt;400&gt; 28

Gly Lys Arg Val Ala Lys Arg Lys Leu Ile Glu Gln Asn Arg Glu Arg  
1 5 10 15

Arg Arg

&lt;210&gt; 29

&lt;211&gt; 18

&lt;212&gt; PRT

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&lt;400&gt; 29

Gly Arg Lys Leu Lys Lys Lys Asn Glu Lys Glu Asp Lys Arg Pro  
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Arg Thr

&lt;210&gt; 30

&lt;211&gt; 17

&lt;212&gt; PRT

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; peptide

&lt;400&gt; 30

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Gly Lys Lys Thr Asn Leu Phe Ser Ala Leu Ile Lys Lys Lys Lys Thr  
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Ala

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Arg Arg

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Lys Leu

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Gly Lys Arg Arg Arg Arg Ala Thr Ala Lys Tyr Arg Ser Ala His  
Page 8

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Arg

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## HMR2053.ST25

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&lt;211&gt; 16

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&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; peptide

&lt;400&gt; 40

Ser Ala Arg His His Cys Arg Ser Lys Ala Lys Arg Ser Arg His His  
1 5 10 15

&lt;210&gt; 41

&lt;211&gt; 16

&lt;212&gt; PRT

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; peptide

&lt;400&gt; 41

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&lt;210&gt; 42

&lt;211&gt; 16

&lt;212&gt; PRT

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; peptide

&lt;400&gt; 42

Ser Arg Arg Ala His Cys Arg Ser Lys Ala Lys Arg Ser Arg His His  
1 5 10 15

&lt;210&gt; 43

&lt;211&gt; 16

&lt;212&gt; PRT

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; peptide

&lt;400&gt; 43

Ser Arg Arg His Ala Cys Arg Ser Lys Ala Lys Arg Ser Arg His His  
1 5 10 15

&lt;210&gt; 44

&lt;211&gt; 16

&lt;212&gt; PRT

&lt;213&gt; Artificial

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<400> 44

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1 5 10 15

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Ser Arg Arg His His Cys Arg Ser Lys Ala Ala Arg Ser Arg His His  
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<400> 51

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<400> 52

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Gln Glu Leu Ser Glu Gln Ile His Arg Leu Leu Leu Gln Pro Val  
1 5 10 15

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<220>  
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<400> 54

Xaa Xaa Xaa Xaa  
1